Templates Part II
Interim Progress Report - Budget Period Three
Workplan - Budget Period Four
Focus Area E: Health Alert Network/Communications and Information Technology

Budget Period Three Progress Report

Using the Interim Progress Report template below, provide a brief status report that describes progress made toward achievement of each of the *critical capacities* and *critical benchmarks* outlined in the continuation guidance issued by CDC in February 2002. Applicants should describe their agency's overall success in achieving each critical capacity. The progress report narratives should not exceed 1 page, single-spaced, for each critical capacity. Applicants are welcome to use bullet-point format in their answers, so long as the information is clearly conveyed in the response.

CRITICAL CAPACITY: To ensure effective communications connectivity among public health departments, healthcare organizations, law enforcement organizations, public officials, and others as evidenced by: a) continuous, high speed connectivity to the Internet; b) routine use of e-mail for notification of alerts and other critical communication; and c) a directory of public health participants (including primary clinical personnel), their roles, and contact information covering all jurisdictions.

Provide an update on progress during Project Year III toward achieving this critical capacity:

- Thirty-four of the state's thirty-five local health agencies have routine access to the Internet, and participate in the Intergovernmental Network. This allows them access to Internet-based information and alerts, as well as to state- and locally-developed Web-based applications.
- Washington State Department of Health (DOH) established a mechanism for 24/7 monitoring of Center for Disease Control and Prevention's (CDC) Health Alert Network. Messages received are rapidly forwarded to the [redacted] list serves. Those lists include over 500 public health officials from state and local public health as well as many tribal representatives. Local health officials in turn communicate via e-mail and fax with hospitals and health care providers in their communities. In the past six months, this system has been tested frequently through the dissemination of urgent communications related to Severe Acute Respiratory Syndrome (SARS), the smallpox vaccination program and monkeypox.
- DOH purchased the BioTerrorism Readiness Suite® from Virtual Alert Inc.®. This highly configurable software application will provide integrated and targeted messaging functions with a secure Web portal for sensitive and technically specific content for the public health system and its emergency response partners. This software will provide the basis for the Washington Secure Electronic Communication and Urgent Response System (WA-SECURES) In the future, we will be able to use WA-SECURES to distribute messages and alerts on a targeted basis to those entities, as

well as hospital staff, emergency managers, laboratory staff, and clinicians across the state.

- Washington State maintains a paper directory of contact information for key local and state public health personnel as well as emergency management agencies. This information, which is updated twice a year, is used for emergency contact between agencies. In the future, we will incorporate this information into an electronic public health directory that will be used by WA-SECURES for automatic, electronic distribution of alerts and communication.

Critical Benchmark #11: Estimate the percentage of your state's population that lives in local jurisdictions that are covered by the Health Alert Network

___100_ %

Critical Benchmark #12: Is your state's communication system capable of sending and receiving critical health information (including alerts of emergency event data) among hospital emergency departments, state and local officials and law enforcement officials, 24 hours a day, 7 days a week?

☒ **YES** ☐ **NO**

CRITICAL CAPACITY: To ensure a method of emergency communication for participants in public health emergency response that is fully redundant with e-mail.

Provide an update on progress during Project Year III toward achieving this critical capacity:

- Washington State maintains a paper directory of contact information for key local and state public health personnel as well as emergency management agencies. This information, which is updated twice a year, is used for emergency contact between agencies. In the future, we will be incorporating this information into an electronic public health directory that will be used by WA-SECURES for automatic, electronic distribution of alerts and communication.
- Washington DOH worked closely with the state Emergency Management Division to identify and determine how to use existing emergency communication systems. Through the state Emergency Operations Center, DOH can immediately contact all state and local law enforcement agencies via a teletype system. This system was tested in real-time during the anthrax events of 2001. We can also contact all county emergency management agencies through an emergency radio system. These agencies can, in turn, contact first responders and public health agencies in their communities in the event of an emergency.

CRITICAL CAPACITY: To ensure the ongoing protection of critical data and information systems and capabilities for continuity of operations. (See Appendix 6, IT function #8.)

Provide an update on progress during Project Year III toward achieving this critical capacity:

- As part of the Local Public Health Emergency Preparedness Assessment in 2002, DOH collected data on local health jurisdiction needs and capacities for information technology and implementation of the Public Health Information Network (PHIN). DOH will analyze the data and use it to determine which identified gaps in current capacity and the PHIN standards require funding. DOH began working with Clallam, Island, Chelan and Douglas Counties to upgrade hardware, software, and staff capacity to implement and maintain secure networks. DOH has already provided assistance and resources for increased network security, including installation of and training around firewalls, in all the more populous counties in the state.
- DOH has worked with the state Department of Information Services (DIS) to implement a single portal for secure access to all state-developed applications and data. Use of this portal requires high security digital certificates, and will be necessary for access to WA-SECURES, Public Health Issues Management Systems (PHIMS) and other critical applications. Digital certificates have been issued to at least one representative in each local health agency, and training has been provided on their use.
- A disaster recovery plan is being developed for DOH that will identify mechanisms by which all of the state's mission critical systems can be kept operating following an emergency, whether naturally occurring such as an earthquake or due to information system failures caused by virus attacks. DOH will encourage local health agencies to develop similar plans.

CRITICAL CAPACITY: To ensure secure electronic exchange of clinical, laboratory, environmental, and other public health information in standard formats between the computer systems of public health partners. Achieve this capacity according to the relevant IT Functions and Specifications.

Provide an update on progress during Project Year III toward achieving this critical capacity:

- Over the past year, DOH reviewed its electronic data interchange efforts (EDI) to determine the best strategy for public health messaging from clinical laboratories and hospitals. This review led to a decision to replace our current EDI software, a package originally produced by PaperFree, with a more robust, flexible application that will support a much more complex EDI system. We are planning for and going through a selection process to identify the best product, and will implement that change in 2003.
- Washington is exploring public health messaging from hospitals through a pilot project to obtain birth defects data. The messaging component of the pilot was a success. Further work has been deferred until the new EDI system is in place.
- Washington actively participates at the national level in the refinement and adoption of standard vocabularies necessary for public health messaging. Washington is incorporating these vocabularies into all messaging done through the state's EDI system where possible. Washington is also looking at alternative formats for reporting organizations that are unable to submit messages using standard codes, as an interim solution until standard codes are universally adopted.

Budget Year Four Workplan

For each Recipient Activity applicants should complete the work plan templates attached below. Applicants are welcome to use bullet-point format in their answers, so long as the information is clearly conveyed in the response. All responses should be brief and concise. **Please note that full use of the CDC templates will meet all of the requirements for submission of a progress report and work plan**. Although no additional information is required, grantees may elect to submit other essential supporting documents via the web portal by uploading them as additional electronic files.

CRITICAL CAPACITY #11: To ensure effective communications connectivity among public health departments, healthcare organizations, law enforcement organizations, public officials, and others (e.g. hospitals, physicians, pharmacies, fire departments, 911 Centers)

RECIPIENT ACTIVITIES:

1. Implement a plan for connectivity of key stakeholders involved in a public health detection and response including a 24/7 flow of critical health information, such as clinical data (build according to IT functions #1-3 in Appendix 4), alerts, (build according to IT Functions #7-9 in Appendix 4) and critical event data, (IT Functions #1-3 in Appendix 4), among hospital emergency departments, state and local public health officials, law enforcement, and other key participants (e.g. physicians, pharmacies, fire departments, 911 Centers) **(LINK TO CROSS CUTTING ACTIVITY *INTEROPERABILITY OF IT SYSTEMS*, Attachment X) (CRITICAL BENCHMARK #18)**

Strategies: What overarching approach(es) will be used to undertake this activity?

Note: Key stakeholders for the coming grant year are defined as local and state public health agencies, hospital emergency departments and emergency management agencies. Priority stakeholders for following years are infectious disease specialists and infection control practitioners, large clinician practices, law enforcement agencies, first responders, individual clinicians and pharmacists.

1. Assure 24/7 connectivity and communications between state health department, local health agencies, emergency departments of hospitals and emergency management agencies.
2. Assure at least three types of redundant communications capability [redacted] are in place in state health department, local health agencies and emergency departments of hospitals, and that these connect with existing emergency management communications systems.
3. Establish Internet-based alerting mechanisms for key stakeholders.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a. In conjunction with Critical Benchmarks 7 and 9, develop policies for roles and responsibilities of

duty officers for each key stakeholder.

1b. Develop a communication plan for development and implementation of 24/7 emergency alerting capacity in all local and state health agencies, hospital emergency departments, and emergency management agencies.

1c. For each key stakeholder organization (each local health agency, hospital emergency department, state health department, and emergency management agency) establish a 24/7 duty officer role, define a roster of individuals responsible for carrying out that role, and provide training as necessary in conjunction with Focus Area G.

1d. Assure that organizations lacking necessary equipment for duty officer role (ie, pagers, cell phones, wireless radios) are able to acquire such equipment. Technology solution needs to be appropriate for each jurisdiction.

1e. Establish a process in each key stakeholder organization for maintaining the duty officer role and for disseminating agency contact information to other key stakeholders.

1f. Proceed with implementation of Washington State Electronic Communications and Urgent Response System (WA-SECURES), to allow automated voice and e-mail communications with key stakeholders (initially local health departments, then hospital emergency departments and emergency management agencies).

2a. Continue current program of assessing redundant communication needs for hospitals and local health agencies.

2b. Identify gaps in redundant communication needs and provide necessary technology to fill those gaps.

2c. Continue with implementation of the hospital communications technology plan.

3a. Define the types of alerts that are routinely generated and identify the following items:
- -- Type of message
- -- Current delivery format
- -- Alert level (1 – immediate, 2 – prompt, 3 – next business day)
- -- Message confirmation required
- -- Amount of information being delivered, pamphlet, one page, book, e-mail

3b. Define standard alerting mechanisms for Internet-based systems
- -- What types of information should be disseminated via Internet-based systems?
- -- What limitations on access should there be to this information?
- -- What processes should be used for posting this information to Internet sites?

3c. Review current public health, emergency response and healthcare-related Internet sites, and identify appropriate sites for dissemination of alerts and other information to key stakeholders. Decision on appropriate sites to include consideration of:
- -- Type of system
- -- System manager
- -- Access/security level (1 – confidential info, 2 – sensitive info, 3 – general release)
- -- Support plan for 24/7 coverage/maintenance of web site
- -- Use of web site by target stakeholder audience

3d. Engage existing organizations that provide Internet-based information to key stakeholders in

agreements to post alerts as necessary, following defined alerting mechanisms (i.e., Harborview Bed Count site, RAMSES, others as appropriate).

Timeline: What are the critical milestones and completion dates for each task?

1a. Policy developed based on definition of 24/7 response in Critical Benchmark 7.

1b. Communication plan developed for 24/7 implementation of emergency alerting system.

1c. Duty officer role is established in each key stakeholder organization and initial group of duty officers are trained – December 2003.

1d. Equipment necessary for duty officer role distributed to key stakeholders – January 2004.

1e. Process established for maintaining duty officer role and disseminating contact information – January 2004.

1f. WA-SECURES is implemented in local health agencies – January 2004.

WA-SECURES is implemented in hospitals and with emergency management agencies – August 2004.

2a, b, c – Redundant communications devices are distributed to key stakeholders – August 2004.

3a. Types of alerts are defined – September 2003.

3b. Alerting mechanisms for Internet-based systems are defined – October 2003.

3c. Existing Internet-based information systems are identified – October 2003.

3d. Internet-based information dissemination organizations are engaged to post alerts – December 2003.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a. State and regional emergency response coordinators.

1b. DOH Washington Electronic Disease Surveillance System (WEDSS); state and regional emergency response coordinators.

1c. Local health agencies, hospitals, state DOH, Focus Area G.

1d. DOH WEDSS.

1e. Local health agencies, hospitals, state DOH.

1f. DOH WEDSS; State and Regional Emergency Response Coordinators.

2 a, b, c. DOH Emergency Response Program.

3a. State and Regional Emergency Response Coordinators.

3b. DOH WEDSS.

3c. DOH Communications Office.

3d. DOH WEDSS.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- Percentage of local health agencies that have identified duty officer and established 24/7 coverage.
- Percentage of local health agencies and hospitals that have wireless communication devices.
- Percentage of key stakeholders with access to WA-SECURES alerting system.
- Percentage of key stakeholders receiving alerts via identified Internet-based information systems.

2. Ensure, by testing and documentation, at least 90 percent of the key stakeholders involved in a public health response can receive and send critical health information including alerts and critical event data. (Build according to Appendix 4 - IT Functions and Specifications.) **(CRITICAL BENCHMARK #19)**

Strategies: What overarching approach(es) will be used to undertake this activity?

Note: Key stakeholders for the coming grant year are defined as local and state public health agencies, hospital emergency departments and emergency management agencies. Priority stakeholders for following years are infectious disease specialists and infection control practitioners, large clinician practices, law enforcement agencies, first responders, individual clinicians and pharmacists.

1. In collaboration with Focus Areas A and F, routinely test and document timeliness and completeness of communication and alerting systems.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a. Define testing process for communication and alerting systems.
1b. Test communication and alerting systems.
1c. Document results.
1d. Identify problem areas.
1e. Develop and implement solutions for problem areas.
1f. Test again.

Timeline: What are the critical milestones and completion dates for each task?

1a. Testing process is defined – December 2003.
1b. Test is conducted – March 2004.
1c. Results are summarized – May 2004.
1d. Problem areas identified – June 2004.
1e. Solutions for problem areas developed and implemented – January 2005.
1f. Repeat test – March 2005.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

All tasks – DOH.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

Percentage of key stakeholders who document ability to send and receive alerts.

3. Develop effective public health communications connectivity by identifying local health agencies to serve as model sites for training and education, support for organizational capacity building, and the creation of knowledge management systems for public health practitioners. In selecting sites, grantees should consider localities that were among the 120 cities identified in the Response to Weapons of Mass Destruction Act of 1997, are the largest population centers in the state, are state capitals, have special significance for terrorism preparedness and response (e.g., military base, strategic location, international port of entry, special population), and are not direct recipients of funding under this cooperative agreement.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Review accomplishments in emergency preparedness by local health agencies and identify model sites.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a. Develop criteria for model local health sites.
1b. Assess accomplishments of local health agencies against criteria.
1c. Identify model sites.

Timeline: What are the critical milestones and completion dates for each task?

1a. Criteria are developed for model local health sites – March 2004.
1b. Assessment of local health agencies against criteria completed – June 2004.
1c. Model sites identified – August 2004.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a. Regional health agencies and Focus Area G.
1b. DOH Emergency Response Program and Focus Area G; regional health agencies.
1c. DOH Emergency Response Program and Focus Area G; regional health agencies.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

Model local health sites are identified.

4. (Smallpox) Develop a system to enhance public health capacity for recruitment and tracking of participants, data collection, storage, and management, reporting and evaluation activities related to the National Smallpox Vaccination Program.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Maintain Pre-event Vaccination Management System (PVMS) to track participants and program data and to report information to National Smallpox Vaccination Program.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1. Establish maintenance framework for PVMS.

Timeline: What are the critical milestones and completion dates for each task?

1. Maintenance framework established – July 2003.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1. DOH WEDSS.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

Maintenance framework established.

5. (Smallpox) Ensure that hospitals, clinics, and other participants in the National Smallpox Vaccination Program maintain a directory of smallpox vaccination team members and are provided regular updates on implementation of program activities with appropriate technical assistance.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Define a specific process and requirements for participating organizations to maintain smallpox team information.
2. Assure ongoing communication with organizations that maintain smallpox response teams on program activities.
3. Link information as appropriate and necessary to state Learning Management System in Focus Area G to help track team members' competencies and training.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a. Develop requirements and processes for participating organizations to use in maintaining information about smallpox response team members.

1b. Educate participating organizations about requirements and processes.

2a. Develop and implement a communication plan for participating organizations about smallpox response program activities.

3. Participate in planning for Learning Management System to assure ability to track necessary information about smallpox response members.

Timeline: What are the critical milestones and completion dates for each task?

1a. Requirements and processes are defined – September 2003.

1b. Participating organizations are educated about requirements and processes – December 2003.

2a. Communication plan is developed and implemented – March 2004.

3. Participated in Learning Management System planning – August 2004.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a. Smallpox Vaccination Program Manager.

1b. Regional Health Agencies.

2a. Smallpox Vaccination Program Manager.

3. Smallpox Vaccination Program Manager and Focus Area G.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- Percentage of organization with smallpox response teams that are maintaining required information on those teams.
- Successful implementation of communication plan.

CRITICAL CAPACITY #12: To ensure a method of emergency communication for participants in public health emergency response that is fully redundant with standard Telecommunications (telephone, e-mail, Internet, etc.).

RECIPIENT ACTIVITIES:

1. Assess the capacity in your jurisdiction for redundant communication systems/devices (two-way radios, cell phones, voice mail boxes, satellite phones, amateur radio groups, hand radios or wireless messaging), the capacity of existing systems at the state and local level to broadcast and/or autodial to automatically distribute alerts and messages to these systems/devices, and the capacity to link to the emergency communication systems of local emergency response partners. If necessary, make improvements during this budget cycle.

Strategies: What overarching approach(es) will be used to undertake this activity?

Note: Key stakeholders for the coming grant year are defined as local and state public health agencies, hospital emergency departments and emergency management agencies. Priority stakeholders for following years are infectious disease specialists and infection control practitioners, large clinician practices, law enforcement agencies, first responders, individual clinicians and pharmacists.

1. Assure 24/7 connectivity and communications between state health department, local health agencies, emergency departments of hospitals and emergency management agencies.
2. Assure at least three types of redundant communications capability (e-mail, voice-mail, wireless radios) are in place in state health department, local health agencies and emergency departments of hospitals, and that these connect with existing emergency management communications systems.
3. Establish Internet-based alerting mechanisms for key stakeholders.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a. In conjunction with Critical Benchmarks 7 and 9, develop policies for roles and responsibilities of duty officers for each key stakeholder.

1b. Develop a communication plan for development and implementation of 24/7 emergency alerting capacity in all local and state health agencies, hospital emergency departments, and emergency management agencies.

1c. For each key stakeholder organization (each local health agency, hospital emergency department, state health department, and emergency management agency) establish a 24/7 duty officer role, define a roster of individuals responsible for carrying out that role, and provide training as necessary in conjunction with Focus Area G.

1d. Assure that organizations lacking necessary equipment for duty officer role (pagers, wireless handhelds, cell phones, wireless radios) are able to acquire such equipment. Technology solution needs to be appropriate for each jurisdiction.

1e. Establish a process in each key stakeholder organization for maintaining the duty officer role and for disseminating agency contact information to other key stakeholders.

1f. Proceed with implementation of WA-SECURES, to allow automated voice and e-mail communications with key stakeholders (initially local health departments, then hospital emergency departments and emergency management agencies).

2a. Continue current program of assessing redundant communication needs for hospitals and local health agencies.

2b. Identify gaps in redundant communication needs and provide necessary technology to fill those gaps.

2c. Continue with implementation of the hospital communications technology plan.

3a. Define the types of alerts that are routinely generated and identify the following items:
-- Type of message
-- Current delivery format
-- Alert level (1 – immediate, 2 – prompt, 3 – next business day)
-- Message confirmation required
-- Amount of information being delivered, pamphlet, one page, book, e-mail

3b. Define standard alerting mechanisms for Internet-based systems
-- What types of information should be disseminated via Internet-based systems?
-- What limitations on access should there be to this information?
-- What processes should be used for posting this information to Internet sites?

3c. Review current public health, emergency response and healthcare-related Internet sites, and identify appropriate sites for dissemination of alerts and other information to key stakeholders. Decision on appropriate sites to include consideration of:
-- Type of system
-- System manager
-- Access/security level (1 – confidential info, 2 – sensitive info, 3 – general release)
-- Support plan for 24/7 coverage/maintenance of web site

-- Use of web site by target stakeholder audience

3d. Engage existing organizations that provide Internet-based information to key stakeholders in agreements to post alerts as necessary, following defined alerting mechanisms (i.e., Harborview Bed Count site, RAMSES, others as appropriate).

Timeline: What are the critical milestones and completion dates for each task?

1a. Policy developed based on definition of 24/7 response in Critical Benchmark 7.

1b. Communication plan developed for 24/7 implementation of emergency alerting system.

1c. Duty officer role is established in each key stakeholder organization and initial group of duty officers are trained – December 2003.

1d. Equipment necessary for duty officer role distributed to key stakeholders – January 2004.

1e. Process established for maintaining duty officer role and disseminating contact information – January 2004.

1f. WA-SECURES is implemented in local health agencies – January 2004.

WA-SECURES is implemented in hospitals and with emergency management agencies – August 2004.

2a, b, c – Redundant communications devices are distributed to key stakeholders – August 2004.

3a. Types of alerts are defined – September 2003.

3b. Alerting mechanisms for Internet-based systems are defined – October 2003.

3c. Existing Internet-based information systems are identified – October 2003.

3d. Internet-based information dissemination organizations are engaged to post alerts – December 2003.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a. State and Regional Emergency Response Coordinators.

1b. DOH WEDSS; State and Regional Emergency Response Coordinators.

1c. Local health agencies, hospitals, state DOH, Focus Area G.

1d. DOH WEDSS.

1e. Local health agencies, hospitals, state DOH.

1f. DOH WEDSS; State and Regional Emergency Response Coordinators.

2 a, b, c. DOH Emergency Response Program.

3a. State and Regional Emergency Response Coordinators.

3b. DOH WEDSS.

3c. DOH Communications Office.

3d. DOH WEDSS.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- Percentage of local health agencies that have identified duty officer and established 24/7 coverage.
- Percentage of local health agencies and hospitals that have received wireless communication devices.
- Percentage of key stakeholders with access to WA-SECURES alerting system.
- Percentage of key stakeholders receiving alerts via identified Internet-based information systems.

2. Implement a second method of receiving critical alerts such as pagers, cell phones, voice mailboxes, or other devices to allow public health participants to receive alerts in full redundancy with e-mail.

Strategies: What overarching approach(es) will be used to undertake this activity?

Same as Critical Capacity 12, Recipient Activity 1.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Same as Critical Capacity 12, Recipient Activity 1.

Timeline: What are the critical milestones and completion dates for each task?

Same as Critical Capacity 12, Recipient Activity 1.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Same as Critical Capacity 12, Recipient Activity 1.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

Same as Critical Capacity 12, Recipient Activity 1.

3. Work with CDC, and as appropriate, other federal agencies, to develop and acquire high frequency and satellite voice/data communications systems between local, state, and federal partners. These systems will be standards based to ensure interoperability.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Use existing systems operated by state, local and federal emergency management agencies.
2. Assure that key stakeholders are in routine communication with emergency management agencies and are able to use existing emergency communication systems when necessary.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1. Identify existing emergency communication systems at local, state and federal level.

2a. Establish contact between key partners and the appropriate emergency management agency (i.e.,

between each local health agency and hospital and their county emergency management agency).

2b. Establish community-based processes for key partners to gain access to emergency communication systems.

2c. Test processes for all key partners.

Timeline: What are the critical milestones and completion dates for each task?

1. Identifying existing systems – October 2003.

2a. Establish contact between partners and emergency management agencies – December 2003.

2b. Establish community-based processes for gaining access to systems – February 2003.

2c. Test processes – March 2003.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a. DOH Office of Risk and Emergency Management, State Department of Emergency Management.

2a. DOH Office of Risk and Emergency Management, State Department of Emergency Management.

2b. State Department of Emergency Management.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- Identification of existing emergency communication systems in each county.
- Percent of key partners that have demonstrated access to existing emergency communication systems.

4. Collaborate with local emergency service providers to acquire technologies and utilize standards developed by CDC to develop UHF/VHF/HF data and/or voice communication capability between key Public Health Partners.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Continue with development and implementation of Washington Hospital and Emergency EMS Radio System (WHEERS) for emergency radio communication between all hospitals and state emergency management.
2. Continue with assessment of radio communication needs, geographic limitations and potential technology solutions for each local health agency.
3. Assure establishment of duty officer roles for each key stakeholder.
4. Connect local health agencies to the hospitals and emergency management agencies in their communities when urgent access to emergency communication systems is required.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1. Continue with implementation of existing WHEERS plan.
2. Continue working with each local health agency to identify needs and appropriate technology solutions.
3. As part of Critical Benchmark 18, establish duty officer for each key stakeholder.
4. Assure that each local health agency has access to emergency communication systems at hospitals and emergency management agencies in their counties.

Timeline: What are the critical milestones and completion dates for each task?

1. Deployment of emergency radio communications to all acute care hospitals in state by August 2004.
2. Complete assessment of emergency communication needs and identification of appropriate solutions by August 2004.
3. Establishment of duty officers for all key stakeholders by January 2004.
4. Verification that each local health agency has access to emergency communications systems in their counties by August 2004.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1. DOH Emergency Preparedness and Response Program.
2. DOH WEDSS Program.
3. Local health agencies, hospitals, state DOH.
4. DOH Office of Risk and Emergency Management.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- Percentage of acute care hospitals with access to WHEERS.
- Percentage of local health agencies with completed needs assessments and identified technology solutions.
- Percentage of key stakeholders establishing duty officers.
- Percentage of local health agencies with verified access to emergency communications systems.

5. Develop broadcast auto-dialing voice messaging capabilities.

Strategies: What overarching approach(es) will be used to undertake this activity?

Same as Critical Capacity 12, Recipient Activity 1.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Same as Critical Capacity 12, Recipient Activity 1.

Timeline: What are the critical milestones and completion dates for each task?

Same as Critical Capacity 12, Recipient Activity 1.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Same as Critical Capacity 12, Recipient Activity 1.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

Same as Critical Capacity 12, Recipient Activity 1.

6. Provide for technological and staffing redundancy of critical information and communication systems to support these functions. (Build according to IT function #9 in Appendix 4.)

Strategies: What overarching approach(es) will be used to undertake this activity?

To be completed as part of multiple activities in Critical Capacities 11 and 12.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

7. Routinely assess the timeliness and completeness of the redundant method of alerting, as it exists to reach participants in public health response. **(CRITICAL BENCHMARK #20)**

Strategies: What overarching approach(es) will be used to undertake this activity?

Note: Key stakeholders for the coming grant year are defined as local and state public health agencies, hospital emergency departments and emergency management agencies. Priority stakeholders for following years are infectious disease specialists and infection control practitioners, large clinician practices, law enforcement agencies, first responders, individual clinicians and pharmacists. 1. In collaboration with Focus Areas A and F, routinely test and document timeliness and completeness of communication and alerting systems.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a. Define testing process for communication and alerting systems. 1b. Test communication and alerting systems. 1c. Document results.

1d. Identify problem areas.
1e. Develop and implement solutions for problem areas.
1f. Test again.

Timeline: What are the critical milestones and completion dates for each task?

1a. Testing process is defined – December 2003.
1b. Test is conducted – March 2004.
1c. Results are summarized – May 2004.
1d. Problem areas identified – June 2004.
1e. Solutions for problem areas developed and implemented – January 2005.
1f. Repeat test – March 2005.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

All tasks – DOH.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

Percentage of key stakeholders who document ability to send and receive alerts.

CRITICAL CAPACITY #13: To ensure the ongoing protection of critical data and information systems and capabilities for continuity of operations in accordance with IT function #8 (see Appendix 4).

RECIPIENT ACTIVITIES:

1. Assess the existing capacity in your jurisdiction regarding policies and procedures for protecting and granting access to secure systems for the management of secure information, system backups, and systems redundancy. If necessary, develop a proposal for improvements during this budget cycle.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Analyze results of assessments performed by public health agencies and hospitals in 2003 to identify potential security issues.
2. Work with individual organizations and facilities to assure implementation of security improvements.
3. Develop and deploy model security policies and procedures to public health agencies.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1. Analyze results of assessments from 2003.
2. Identify necessary improvements for individual organizations and facilities.
3. Develop and deploy model security policies and procedures to public health agencies.

Timeline: What are the critical milestones and completion dates for each task?

1. Results of assessment are analyzed – October 2003.
2. Necessary improvements identified. – December 2003.
3. Model security policies developed and deployed to public health agencies – March 2004.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1. DOH and Regional Health Agencies.
2. DOH and Regional Health Agencies.
3. DOH.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- Assessment results analyzed.
- Percentage of organizations needing security improvements that have made improvements.

2. Perform regular independent validation and verification of Internet security, vulnerability assessment, and security and continuity of operations practices, and rapidly implement recommended remedial activities.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Establish process for testing security of public health agency information systems.
2. Work with hospitals to determine best mechanism for verifying security of hospital information systems.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1. Establish process for testing security of public health agency information systems.
2. Determine best mechanism for verifying security of hospital information systems.

Timeline: What are the critical milestones and completion dates for each task?

1. Process for testing security established – December 2003.
2. Mechanism for determining security of hospital information systems identified – March 2004.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1. DOH.
2. Washington State Hospital Association.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- Process for testing security of public health agencies established.

- Status of facility security evaluation compared with Health Insurance Portability and Accountability Act (HIPAA) requirements.

3. **Activities that may be considered:**

a. Establish a firewall for the protection of critical information resources from the Internet.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Implement as necessary in individual public health agencies and hospitals based on results of assessment.

   Use national standards for selection of technology.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Same as Critical Capacity 13, Recipient Activity 1.

1a. Analyze results of assessments performed by public health agencies and hospitals in 2003 to identify potential security issues.

2a. Work with individual organizations and facilities to assure implementation of security improvements.

3a. Develop and deploy model security policies and procedures to public health agencies.

Timeline: What are the critical milestones and completion dates for each task?

Same as Critical Capacity 13, Recipient Activity 1.

1a. Analyze results of assessments from 2003.

2a. Identify necessary improvements for individual organizations and facilities.

3a. Develop and deploy model security policies and procedures to public health agencies.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Same as Critical Capacity 13, Recipient Activity 1.

1a. DOH and Regional Health Agencies.

2a. DOH and Regional Health Agencies.

3a. DOH.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

Same as Critical Capacity 13, Recipient Activity 1

- Assessment results analyzed.
- Percentage of organizations needing security improvements that have made improvements.

b. Implement Public Key Encryption (PKI), according to specifications in IT Function #9

(see Appendix 4) or equivalent methods of strong authentication for remote access from the Internet.

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Implement as part of deployment of Washington PHIMS, WA-SECURES and other applications as appropriate.
2. Use existing Washington State Internet security infrastructure, with high security digital certificates issued to key partners and access provided through single state portal – Transact Washington.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1. Continue working with Department of Information Services on development and use of Transact Washington.

2a. Assure that applications requiring high levels of security incorporate digital certificate access and authentication mechanisms.

2b. Continue to issue digital certificates and provide training to key partners.

Timeline: What are the critical milestones and completion dates for each task?

1, 2a, 2b. All tasks are underway. Work will continue over the course of the coming grant year.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1, 2a, 2b. DOH and state Department of Information Services.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

Number of key partners successfully using digital certificates to access critical state applications.

c. Develop role-based authorization technology and processes to ensure selective authorization to information resources using technologies identified in IT Function #7 (see Appendix 4).

Strategies: What overarching approach(es) will be used to undertake this activity?

Same as Critical Capacity 13, Recipient Activity 3b.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

d. Institute server- and client-based virus checking software to protect critical systems.

Strategies: What overarching approach(es) will be used to undertake this activity?

Implemented as necessary based on the results of the assessment.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

e. Contract with an independent IT security firm to perform ongoing penetration testing and vulnerability analysis.

Strategies: What overarching approach(es) will be used to undertake this activity?

Implemented as necessary based on result of assessment.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

f. Integrate all remote access to health department IT resources using commercial, off-the-shelf products for a single method of authentication.

Strategies: What overarching approach(es) will be used to undertake this activity?

Same as Critical Capacity 13, Recipient Activity 3b.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

g. Implement software systems and/or servers to support Critical Capacities elsewhere in this guidance. Provide training and support on these systems to improve the ability of public health participants to effectively use them.

Strategies: What overarching approach(es) will be used to undertake this activity?

Integrated into individual workplans for PHIMS, WA-SECURES, PVMS and other relevant applications.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

CRITICAL CAPACITY #14: To ensure secure electronic exchange of clinical, laboratory, environmental, and other public health information in standard formats between the computer systems of public health partners. Achieve this capacity according to the relevant IT Functions and Specifications (see Appendix 4).

RECIPIENT ACTIVITIES:

1. Assess the existing capacity in your jurisdiction to exchange electronic data in compliance with public health information and data elements exchange standards, vocabularies, and specifications as referenced in the NEDSS initiative. (Build according to IT Functions #1-9 in Appendix 4.) If necessary, develop a proposal for improvements during this budget cycle. **(LINK WITH CROSS CUTTING ACTIVITY *INTEROPERABILITY OF IT SYSTEMS*, Attachment X)**

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Review results of information technology assessment conducted in 2002/2003.
2. Identify and assess capacity of key partners who may have been missed in first assessment.
3. Develop plan for addressing needs related to electronic data interchange, with implementation integrated into current EDI plans.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1. Review results of information technology assessment.
2. Identify key partners who may have been missed in the first assessment, and apply the same assessment to them.
3. Develop plan based on results of assessment analysis and on current EDI plans.

Timeline: What are the critical milestones and completion dates for each task?

1. IT assessment reviewed – October 2003.
2. Assessment of partners missed in first round – January 2004.
3. Plan developed for addressing needs – March 2004.

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

All tasks – DOH.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- Complete review and analysis of IT assessments for all key partners.
- Development of plan to address needs.

2. Ensure that the technical infrastructure exists to exchange a variety of data types, including possible cases, possible contacts, specimen information, environmental sample information, lab results, facilities, and possible threat information. (Build according to IT Functions #1-9 in Appendix 4). **(CRITICAL BENCHMARK #21)**

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Establish infrastructure, consistent with Public Health Information Network (PHIN) and other national standards to support electronic data interchange with a variety of partners, with initial emphasis on hospital and clinical laboratories.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a. Work with DIRM to complete and get signed off the Information Technology Plan
1b. Work with Department of Information Services (DIS) to resolve security issues associated with EDI with state agencies, with focus on EDI issues raised by electronic transactions to be performed under the Bioterrorism Cooperative Agreement.
1c. Define functional requirements in Joint Application Development sessions with laboratories.
1d. Identify prioritized LRN laboratories for implementation.
1e. Adapt existing software code from model projects and other sources to meet Washington needs.
1f. Test system.
1g. Pilot system.
1h. Perform Quality Assurance review.
1i. Deploy system to prioritized laboratories.

Timeline: What are the critical milestones and completion dates for each task?

1a. Get approval on Information Technology Plan – June 2003.
1b. With DIS, resolve security issues for state EDI applications – July 2003.
1c. Complete Joint Application Development sessions to obtain functional requirements for laboratories – August 2003.
1d. Identify prioritized LRN laboratories for implementation – October 2003.
1e. Adapt existing code to meet Washington's needs – October 2003.
1f. Test system – December 2003
1g. Pilot system – January 2004
1h. QA Review – January 2004
1i. Deploy to prioritized laboratories – March 2004

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

All tasks – DOH WEDSS.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- Approval by DIS to proceed with security solution.
- Demonstration of functional, secure electronic laboratory reporting system.
- Number of laboratories submitting data electronically.

3. Develop firewall capabilities and Web technology and expertise to implement and maintain an

XML-compliant SOAP service for the secure exchange of information over the Internet.

Strategies: What overarching approach(es) will be used to undertake this activity?

To be completed as part of multiple recipient activities associated with Critical Capacities 13 and 14.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

4. Develop systems and databases to implement the specifications, vocabularies, and standards to exchange like data with public health partners.

Strategies: What overarching approach(es) will be used to undertake this activity?

To be completed as part of multiple recipient activities associated with Critical Capacities 13 and 14.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

5. Implement message parsing technology to allow for the creation and processing of public health information messages.

Strategies: What overarching approach(es) will be used to undertake this activity?

To be completed as part of multiple recipient activities associated with Critical Capacities 13 and 14.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

6. Participate in national stakeholders meetings, data modeling activities, and joint application development sessions to help specify the data types that will be exchanged among public health partners and to understand how to implement them.

Strategies: What overarching approach(es) will be used to undertake this activity?

To be completed as part of multiple recipient activities associated with Critical Capacities 13 and 14.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

7. (HRSA/CDC Cross-Cutting Activity) Laboratory Data Standard
   a. Adopt and implement LOINC as the standard for electronic exchange of clinical laboratory results and associated clinical observations between and among public health department laboratories, hospital-based laboratories, and other entities, including collaborating academic health centers, that have a major role in responding to bioterrorism and other public health emergencies. **(CRITICAL BENCHMARK #22)**

Strategies: What overarching approach(es) will be used to undertake this activity?

1. Implement a system that accepts notifiable conditions reports from clinical and hospital laboratories and delivers reports to appropriate public health jurisdictions, using PHIN standards including required coding formats such as LOINC.

Prioritize laboratories in the LRN, especially state and local public health laboratories.

Establish expectation for hospitals to prepare for electronic reporting of data to public health, including planning for modifications to hospital information systems to permit generation of electronic messages that meet required public health format.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

1a. Work with DOH Division of Information Resource Management (DIRM) to complete and get signed off the Information Technology Plan
1b. Work with Department of Information Services to resolve security issues associated with EDI with state agencies.
1c. Define functional requirements in JAD sessions with laboratories.
1d. Define expectations for electronic reporting of data from hospitals to public health agencies. *Note – defining desired direction only, not requiring reporting.*
1e. Adapt existing software code from model sites and other sources to meet Washington needs.
1f. Identify priority LRN laboratories for implementation.
1g. Test system.
1h. Pilot system.
1i. Perform quality assurance review.
1j. Deploy system to prioritized laboratories.

Timeline: What are the critical milestones and completion dates for each task?

1a. Get approval on Information Technology Plan – June 2003.

1b. With DIS, resolve security issues for state EDI applications – July 2003.

1c. Complete JAD sessions to obtain functional requirements for laboratories – August 2003.

1d. Expectations defined for electronic reporting from hospitals to public health agencies – August 2003.

1e. Identify prioritized LRN laboratories for implementation – October 2003.

1f. Adapt existing code to meet Washington needs – October 2003.

1g. Test system – December 2003

1h. Pilot system – January 2004

1i. QA Review – January 2004

1j. Deploy to prioritized laboratories – March 2004

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

1a-c and e-j DOH WEDSS.

1d DOH WEDSS and Washington State Hospital Association.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

- Approval by DIS to proceed with security solution.
- Demonstration of functional, secure electronic laboratory reporting system.
- Number of laboratories submitting data electronically.
- Commitment from hospitals to prepare for electronic reporting.
- Evaluate the data completeness for electronic versus paper reports
- Evaluate the mean and median time to deliver electronic versus paper reports.

b. In connection with CDC-provided technical assistance, identify areas where refinement or extension of LOINC would enhance public health emergency preparedness.

Strategies: What overarching approach(es) will be used to undertake this activity?

To be completed as part of Critical Capacity 14, Recipient Activity 7.

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

ENHANCED CAPACITY #9: To provide or participate in an emergency response management system to aid the deployment and support of response teams, the management of response resources, and the facilitation of inter-organizational communication and coordination.

RECIPIENT ACTIVITIES:

1. Assess the existing capacity in your jurisdiction related to emergency response management systems. Identify existing systems and ascertain their relevance and suitability for public health participation, including disaster simulation, logistics management, threat tracking and management, geographic mapping for visualization of events, and emergency resource provision and management. If necessary, develop a proposal for improvements during this budget cycle. **(LINK TO CROSS CUTTING ACTIVITITY *INTEROPERABILITY OF IT SYSTEMS,* Attachment X)**

Strategies: What overarching approach(es) will be used to undertake this activity?

NA

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

2. Ensure participation, training, and drilling of public health personnel in the use of an emergency response management system.

Strategies: What overarching approach(es) will be used to undertake this activity?

NA

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

3. If an adequate system does not exist with emergency response partners, implement a commercial, off-the-shelf system for the support of these functions.

Strategies: What overarching approach(es) will be used to undertake this activity?

NA

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

4. Train and drill public health participants in the use of existing emergency response systems.

Strategies: What overarching approach(es) will be used to undertake this activity?

NA

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

ENHANCED CAPACITY #10: To ensure full information technology support and services.

RECIPIENT ACTIVITIES:

1. Assess the existing capacity in your jurisdiction related to the full provision of information technology support according to industry standard practices including modern software development practices, user support practices, and ongoing monitoring and maintenance of systems. If necessary, develop a proposal for improvements during this budget cycle.

Strategies: What overarching approach(es) will be used to undertake this activity?

NA

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

2. Implement explicit arrangements/written policies for adequate network and desktop user support, including the ability of users to obtain answers to hardware and software operational questions, repair of equipment, installation of new equipment and software, administration of servers where appropriate, and other general technical support.

Strategies: What overarching approach(es) will be used to undertake this activity?

NA

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

3. Develop technical support staff available in an industry standard ratio of one full time equivalent support person for each 60-100 workstations covered.

Strategies: What overarching approach(es) will be used to undertake this activity?

NA

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

4. Provide critical operational support functions with less than 24-hour alternate site provision.

Strategies: What overarching approach(es) will be used to undertake this activity?

NA

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?

5. Implement software and/or systems to support critical activities elsewhere in this guidance with appropriate redundancy, systems mirroring, and/or systems fail-over to provide secure and continuous access to critical IT services.

Strategies: What overarching approach(es) will be used to undertake this activity?

NA

Tasks: What key tasks will be conducted in carrying out each identified strategy?

Timeline: What are the critical milestones and completion dates for each task?

Responsible Parties: Identify the person(s) and/or entity assigned to complete each task.

Evaluation Metric: How will the agency determine progress toward successful completion of the overall recipient activity?